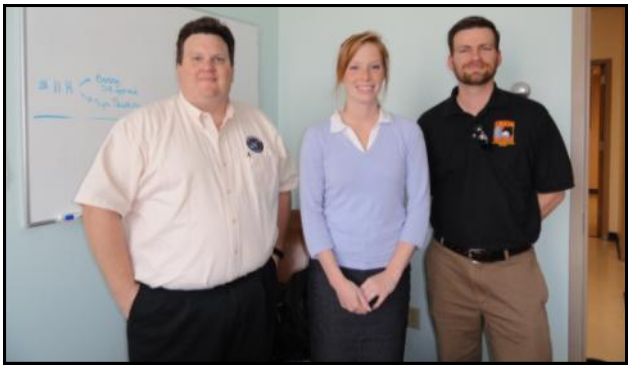
ORION
CREW EXPLORATION VEHICLE

WEEKLY ACCOMPLISHMENTS

05.14.10

We continue to receive data from last week's successful Pad Abort 1 Test at White Sands Missile Range (WSMR) in New Mexico. All hardware was recovered and the team began disassembling and inspecting the various components. The data indicates there were no system anomalies, which in turn validates the design of the Launch Abort System and helps to continue the development path to the critical design review.

The trimming process continued on the Ground Test Article (GTA) at the Michoud Assembly Facility in New Orleans, Louisiana. The Cone section of the GTA (shown left) was trimmed in preparation for the upcoming weld to the Forward Bulkhead (shown in foreground above right.) The Forward Bulkhead was placed onto the Cone section after trimming for a fit check to make sure everything is lining up properly before welding takes place. The two sections are scheduled to be welded together next week.



Orion Project team members (Colie Warren and Mike Heckwolf of Lockheed Martin and George Deckert of NASA shown below) gave a lecture at the University of Texas at Austin to an under-graduate systems engineering class. The lecture consisted of an overview of the Risk Informed Design process, an explanation of Probabilistic Risk Assessment (PRA), and the use of the results of the PRA in informing project management on design and operational decisions. The lecture centered on the Process that has been used in the design phase of the Orion Spacecraft and the impact this process has had on design decisions and safety. The Systems Engineering class in which the lecture was given had spent the semester learning how systems engineering fits into the life cycle of engineering projects and the various tools used by the engineers. A generic spacecraft example was used to show how this type of process is used. This example consisted of generic cut-sets, a pare to risk driver chart, and risk versus mass and cost charts for generic decision packages.

Astronaut Scott Altman supported a Skype astronaut experience for a Moon Mars and Beyond class interaction with students at the Lake Forest Country Day School in Chicago, Illinois. The interaction included an interview with Scott and a question and answer session regarding a rescue scenario in space in the year 2080.